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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,264	03/26/2004	Lothar Gasper	GKNG 1192 PUS	1630

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EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,264

Applicant(s)

GASPER, LOTHAR

Examiner

Alison K. Pickard

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,12-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,12-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-9, 12, 13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (Background) in view of DE '194.

Applicant discloses that it is known to use a convoluted boot with plural folds and collars connected to an articulating universal joint. However, Applicant does not disclose the burls on the annular flanks as required by the claims. DE '194 discloses a boot comprising a first collar, second collar, and plural folds 16. Each fold has first 10 and second 14 flanks. Two opposed flanks each have a plurality of raised burls 26, which project from a uniform annular face of the flank. As seen in figures 3, 6, and 7, the raised portions 26 are on circles with different radii and the smaller diameter set is offset from the larger diameter set. DE '194 teaches the use of the burls to provide automatic return of the inward movement of the folds and to strengthen the folds. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the prior art boot with such projections/burls to provide automatic return and strengthen the walls as taught by DE '194.

Regarding claims 3-5, 9, and 13, DE '194 does not appear to disclose the burls with a spherical shape or with the claimed dimensions. Changing the shape is not considered inventive absent a showing of some criticality. See *In re Dailey*, 149 USPQ 47 (CCPA 1966). And, it is

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not considered inventive to discover the workable or optimum ranges by routine experimentation absent the showing of criticality for such ranges. See *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to form the raised portions with the claimed shape and dimensions.

3. Claims 14, 16-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of DE '194 in view of De Monge.

Applicant discloses that it is known to use a convoluted boot with plural folds and collars connected to an articulating universal joint. However, Applicant does not disclose the burls on the annular flanks as required by the claims. DE '194 discloses a boot comprising a first collar, second collar, and plural folds 16. Each fold has first 10 and second 14 flanks. Two opposed flanks each have a plurality of raised burls 26, which project from a uniform annular face of the flank. As seen in figures 3, 6, and 7, the raised portions 26 are on circles with different radii and the smaller diameter set is offset from the larger diameter set. DE '194 teaches the use of the burls to provide automatic return of the inward movement of the folds and to strengthen the folds. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the prior art boot with such projections/burls to provide automatic return and strengthen the walls as taught by DE '194.

DE '194 does not appear to disclose the recesses in the flank surface. De Monge teaches a boot having plural folds with plural reinforcement features. The features can be raised portions or recesses. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify DE '194 with recesses rather than projections as such are taught to be art equivalent reinforcement features on boots.

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Regarding claim 16, DE '194 does not appear to disclose the recesses with a spherical shape. Changing the shape is not considered inventive absent a showing of some criticality. See *In re Dailey*, 149 USPQ 47 (CCPA 1966). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to form the recesses with a spherical shape.

Response to Arguments

4. Applicant's arguments filed 9-28-06 have been fully considered but they are not persuasive and are moot in view of the new grounds of rejection.

DE '194 teaches the use of projections to increase wall strength. Other art, such as Zollinger and De Monge teach this too. DE '194 also teaches an automatic return when the folds are compressed. This would occur in articulated joints. Thus, DE '194 provides motivation to modify prior art boots for articulating joints. Also, DE '194 teaches two sets of projections on each flank. The outer diameter set on one flank is at a different radius than the inner diameter set on the opposite flank, thus the claim language is met.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062. The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alison K. Pickard
Primary Examiner
Art Unit 3673

AP